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ABSTRACT

This report describes a social studies skills enhancement program developed and implemented to improve social studies performance in a public middle school (grades 6-8) in the southeastern United States. The targeted group consisted of four males and four females of mixed performance ability in a sixth grade class. The 12-week study focused on on improvement in: (1) vocabulary skills on a pre- and post-test; (2) use of a CD-ROM card catalog, retrieval system, encyclopedia, and word processing software/hardware as measured by a teacher-made pre- and post-Multimedia Instructional Technology Identification and Usage Skills Tests; and (3) critical thinking map skills on a pre- and post-test. The program contained various activities and strategies using multimedia instructional technology for the improvement of these skills. By comparing the results of pretests and posttest, the study's conclusions indicated that all of the program's objectives were met successfully. Appendices include assessment materials and analysis of assessment data. Eight appendices include tables showing pre- and post-test results and a vocabulary skills midpoint test. (EH)

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**ENHANCING STUDENT PERFORMANCE IN
THE SOCIAL STUDIES THROUGH THE USE OF
MULTIMEDIA INSTRUCTIONAL TECHNOLOGY**

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A Practicum Report

**Submitted to the Faculty of the Center for the Advancement
of Education of Nova University in partial fulfillment
of the requirements for the degree of
Master of Science**

**The abstract of this report may be placed in a
National Database System for reference.**

June/1994

20 024 832

Abstract

Enhancing Student Performance in the Social Studies Through the Use of Multimedia Instructional Technology.

Weiner, Howard, 1994. Practicum Report, Nova University, Abraham S. Fischler Center for the Advancement of Education.

Descriptors: Middle Grades Education/ Social Studies Skills/ Computer Assisted Instruction/ Multimedia Instructional Technology.

This report describes a "Social Studies Skills Enhancement" program that was developed and implemented to improve performance in the social studies in a middle school setting. Three social studies skills were identified for improvement. These skills were vocabulary, information retrieval, and the reading and interpreting of maps. A target group of eight students who lacked these skills was established in the program. The program contained various activities and strategies using multimedia instructional technology for the improvement of these skills. Success was measured by comparing results of pretests and posttests. All of the program's objectives were successfully met. Appendices include assessment materials and analysis of assessment data.

Authorship Statement

I hereby testify that this paper and the work it reports are entirely my own. Where it has been necessary to draw from the works of others, published or unpublished, I have acknowledged such work in accordance with accepted scholarly and editorial practice. I give this testimony freely, out of respect for the scholarship of other workers in the field and in hope that my work, presented here, will earn similar respect.

Howard Weiner
student's signature

Document Release

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6/13/94
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Practicum students in Nova's M.S. and Ed.S. programs are asked to provide external verification that the project activities reported in their final practicum documents took place as described. You have been designated an observer to fulfill this confirmation function by the student named below. On this sheet, then, please write a note attesting to your knowledge of the project activity described in the final practicum report to which this will be attached. (Note that you are not asked to evaluate or make judgements about the quality of the project.)

Practicum Title ENHANCING STUDENT PERFORMANCE IN THE SOCIAL STUDIES THROUGH THE USE OF MULTIMEDIA INSTRUCTIONAL TECHNOLOGY.

Student's Name Howard Weiner

Project Site Fort Lauderdale, Florida **Date** June, 1994

Observer's Name Lisa Garrison Lisa Garrison

Observer's Position Teacher **Phone #** 865-5231

Observer's comment on impact of the project:

I am aware that Howard Weiner has been implementing his practicum on multimedia instructional technology.

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CHAPTER I

Purpose

Background

The targeted educational institution is a public middle school located in a predominantly African American community in the southeastern region of the United States. Dwellings in the immediate school zone are single family homes. The assigned capacity is 694, however, the current population is 852. The faculty and staff consists of one principal, two assistant principals, 29 classroom teachers, two exceptional student education teachers, four guidance counselors, one media specialist, two teacher aids, and five full-time office employees. The ethnicity of the full-time staff is 47 percent White Non-Hispanic, 40 percent Black Non-Hispanic, and 13 percent Hispanic. The regular program pupil to teacher ratio is 25:1. There are three beginning teachers who are participating in the Professional Orientation Program. The average number of years teaching in Florida for staff members is eight. Masters degrees are held by 32 percent of the instructional staff.

The school has a traditional middle school configuration of grades six, seven, and eight. Twenty-two percent of the student population participates in an international studies/foreign language magnet program. These magnet students are not from feeder pattern schools. They are

transported daily from various school sites throughout the school district.

The ethnicity of this middle school's population is 10 percent White Non-Hispanic, 68 percent Black Non-Hispanic, 21 percent Hispanic, and one percent Asian/American Indian.

Stanford Achievement Test scores reflected increases and decreases in student performance based upon a comparison of 1991-1992 to 1992-1993 test results. In the area of Reading Comprehension seventh grade scores decreased five percentile points (32 to 27), and eighth grade scores decreased six percentile points (36 to 30). Mathematics Computations results showed a decrease for seventh grade scores of 16 percentile points (51 to 35), and an increase in eighth grade scores of five percentile points (34 to 39). Mathematics Applications results showed a decrease for seventh grade scores of eight percentile points (36 to 28), and an increase in eighth grade scores of five percentile points (28 to 33). In the area of Concepts of Numbers seventh grade scores decreased by 14 percentile points (42 to 28), while eighth grade scores increased ten percentile points (27 to 37).

In addition to basic curriculum offerings, students receive instruction in Spanish as a Second Language, Spanish for Spanish Speakers, and English for Speakers of Other Languages (ESOL).

The socio-economic stratification of the school's population is lower to lower middle class. The number of students on free lunch are

340, and 146 receive reduced lunch. Thus, a majority of the students are from the lower strata of the economic ladder.

The writer of this practicum report has taught social studies for three years at this school site. Additional responsibilities include sponsorship of the school newspaper, pre-press production of a county-wide middle school newsletter, wrestling team sponsor, systems operator of the school's IBM Local Area Network computer lab, and instructor of an early bird computer applications course in the school's Machintosh lab.

Problem Statement

The transition from elementary school to middle school is both a social and academic challenge to the intermediate level child. Middle school curriculum innovators have attempted to soften this transition through the use of team teaching and the establishment of advisement programs. Yet, academic deficiencies which were evident in the intermediate years are carried over into the classrooms of middle level educational facilities.

The problem that was addressed in this proposal was the performance level of a group of sixth grade students in the area of social studies. As documented by standardized test scores (Appendix A:29), 50 percent of the targeted students lacked the abilities needed to successfully interact

with the demands of the sixth grade social studies curriculum.

The targeted group consisted of eight students, four males and four females. The age of the subjects reflected in birth dates ranging from 9/27/81 to 8/23/82. Report card grades (Appendix B:31) for grading periods one and two (1993-1994) indicated a variety of levels of performance for the targeted group. During these grading periods, grades ranged from a high of A, a grading scale numerical equivalent of 94 to 100, to a low of F, a grading scale numerical equivalent of zero to 64. Midterm exam grades for the targeted group followed the same pattern, from a high of A (94-100) to a low of F (0-64).

The targeted group's level of performance in the social studies was documented by the results of the social science subtest of the 1993 Stanford Achievement Test (Appendix A:29). A cluster analysis of the intermediate two social science subtest, administered to 20,639 fifth grade students countywide, resulted in a median percentile score of 31. The test scores of the targeted group (Appendix A:29) resulted in levels that were above and below the 31 median percentile. Student A scored in the third percentile, 28 percentile points below the county median percentile. Student B scored in the twentieth percentile, 11 percentile points below the county median percentile. Students C and D scored in the twenty-first percentile, 10 percentile points below the county median percentile. Student E scored in the thirty-first percentile, a percentile

equal to the county median percentile. Students F and G scored in the forty-second percentile, 11 percentile points above the county median percentile. Student H scored in the forty-fifth percentile, 14 percentile points above the county median percentile.

The development of academic abilities in the social studies is directly related to student performance. Successful student performance is indicative of the ability to understand social studies vocabulary; the ability to find information contained within resource materials; the ability to read and interpret maps, graphs, and charts; the ability to place events in an orderly fashion by date; and the ability to locate items on a map (Schwartz and O'Connor, 1988).

Based upon the standardized test results cited in this proposal, 50 percent of the subjects did not have the necessary skills/abilities to succeed in their sixth grade social studies class. The other members of the targeted group exhibited success in the social studies based upon standardized test results. The purpose served by having members in the targeted group who have scored at or above the median percentile was to document the percentage growth in social studies skills of those below the norm to those at or above the norm (Appendix C:32). It must be noted that while the 31 percentile was the local norm, it was 19 percentile points below the national average. The factors that contributed to low achievement of some members of the targeted group may include, but are not limited

to, low self-esteem, large class size, and delivery method of instruction. Thus, the individual learning styles and modalities of the entire targeted group were not satisfied.

Outcome Objectives

The purpose of this practicum was to aid a group of sixth grade students enhance their social studies skills through interaction with multimedia instructional technology. The writer of this practicum identified three social studies skills for improvement. These skills were vocabulary, information retrieval, and the reading and interpreting of maps. Twenty percent of the students in the writer's sixth grade class were able to incorporate different social studies skills into their daily routine by using multimedia instructional technology. Eighty percent of the students should have be able to incorporate different social studies skills into their daily routine using multimedia instructional technology. Sixty percent of the students needed to implement social studies skills through the use of multimedia instructional technology in order to improve their level of success.

The writer implemented a "Social Studies Skills Enhancement" program with eight students in the targeted group for 12 weeks. Three outcome objectives were identified and were as follows:

1. Following 12 weeks of implementation 75 percent of the targeted students will increase their vocabulary skills by 40

percent as measured by a teacher-made Pre/Post Vocabulary Test (Appendix D:37).

2. Following 12 weeks of implementation 75 percent of the targeted students will increase their identification and usage skills of a CD-ROM driven automated card catalog system, a CD-ROM driven information retrieval system, a CD-ROM generated encyclopedia, and word processing software/hardware by 30 percent as measured by a teacher-made Pre/Post Multimedia Instructional Technology Identification and Usage Skills Test (Appendix E:41).
3. Following 12 weeks of implementation 75 percent of the targeted students will increase their critical thinking map skills by 40 percent as measured by a teacher-made Pre/Post Map Skills Test (Appendix F:45).

CHAPTER II

Research and Solution Strategy

In general terms, media is considered to be the method by which individuals communicate with one another (Townsend, 1992). The transfer of knowledge from teacher to learner can be successfully completed if lines of communication are open and connections are made. The use of various forms of electronic educational tools or multimedia instructional technology is one method of pedagogical communication being used today. Its use "stimulates all of the learning paths by offering information through pictures, written text, sound, animations, and video to help teachers develop creative, interactive teaching tools to present information in all the ways people really think and learn" (Gates:1993:35). However, according to Townsend (1992), its effectiveness has not been proven since current research is limited regarding student performance and achievement.

There are multiple benefits cited for the use of multimedia instructional technology. It can be designed to meet individual learning styles and modalities. The operational pace is controlled by the learner who in turn creates what is learned. Computer based instruction is a participatory experience which produces a thought provoking environment that negates learner passivity. The use of multimedia acts as a

communicative link between students and between student and teacher. This technology is non-threatening to students. Their daily lives are surrounded by it. The technological advancements of the world outside of the classroom is replete with video games, television, computerized banking institutions, and fast food restaurants (Benefits...:22).

The presence of technology in our educational institutions is evident on all levels. Some critics have argued that since children gain knowledge through interaction with concrete materials, computers should not be used for instructional purposes. According to Clements, Nastasi, and Swaminathan (1993:56), "critics also argue that children must reach elementary school age before they are ready to work with computers. Research indicates the opposite. Even preschool children can use appropriate computer programs." Additionally, Clements and Nastasi (1993:57), stated that "computers can raise mathematics achievement for preschoolers and primary grade children."

Further evidence is cited with regards to the early childhood experience and computers. At the Garfield School in Revere, Massachusetts, a massive restructuring program to bring technology into the classroom resulted in a noticeable improvement in student performance. Although firm data is not available, a number of Cambodian students in the intermediate grades who could not speak English upon entering Garfield, exhibited above grade level scores on the Metropolitan

Achievement Test (Foley, 1993).

Technology has played a role in school improvement. New advances in software and hardware development have led to programs that meet the needs of multiple learning styles. Multilevel programs cater to individualized student needs, learning styles, and modalities. Advanced students can move rapidly to completion of tasks, while those who are less able and often overlooked, can progress at a comfortable rate (Kelly, 1991). Multimedia technology, in its basic and advanced forms, provides a stimulating environment to all levels of learners (Dickenson, 1992).

Multimedia has a place in the realm of cooperative learning and group activities. Interaction between students at computer terminals is a very effective learning / teaching strategy. Computers do not isolate students from one another. Research has shown that the use of computers by preschool children does not interfere with the socialization process (Brinkley, 1993). Based upon familiarity and hardware / software acuity, a student can be paired with a partner who is less adept with the application process, thus forging a working relationship which is beneficial to both (James, 1989). Watson (1991-1992) suggests that students working together achieve more, require less individualized instruction and attention, and appear to spend more time on task.

Computer interaction has impacted on both learning and attendance. The dropout rate in Florida's Escambia County, fell 36 percent after the

district restructured its commitment to the introduction and use of multimedia instructional technology as part of its improvement plan (Anelli, Otto, and Reigeluth, 1992).

As increased interest and opportunity to use technology reaches more classrooms, teacher affirmation must come to fruition. Teachers must meet the challenges of effectively using these advanced techniques in achieving curricular goals (Martorella, 1991). Simon (1990:8) states that "it is increasingly clear that as powerful new technologies and software proliferate, teachers will need to learn more about these new tools on a continuous basis."

Research conducted by Higgins and Boone (1992), used computer technology by adapting a social studies textbook to a hypermedia format which includes the use of computer text and the presentation of information. Their intent was three fold: increase the quality of instructional time, promote curricular change, and a decreased demand of individualized teacher instruction. Three groups were formed: a group which received traditional classroom lecture instruction, a group which received traditional classroom lecture instruction in addition to computer assisted instruction, and a third group which received solely computer assisted instruction. Results indicated that regular education students who received a combination of lecture and computerized instruction performed at a higher level on quizzes when compared to the other two groups.

Marsh (1986) conducted a study utilizing a group of thirty college prep students. Two groups were created for the purpose of this study. The experimental group received computer assisted instruction in the social studies, while the control group received non-computer based, traditional social studies instruction. Findings demonstrated that the group using computers scored higher on a posttest assessment than the members of the control group. Roessler (1987) confirmed the above findings when he concluded that computer assisted instruction is as effective and at times better than other pedagogical methodologies.

Strategy Summary

The strategies for this practicum included stimulating educational technology as proposed by Gates (1993). Cooperative learning activities and social interaction were an integral part of the targeted group's participation in this proposal with suggested outcomes per James (1989), Watson (1991-1992), and Brinkley (1993). Targeted group members were matched by divergent abilities and levels in an effort to achieve growth and performance based upon the findings of Kelly (1991) and Dickenson (1992). As suggested by Martorella (1991) and Simon (1990), training on the use of multimedia technology was provided by a certified media specialist with a clear understanding of hardware and software components. The model for this practicum report was based on research

conducted by Higgins and Boone (1992). The method for instruction leading to enhanced student performance was a combination of traditional classroom instruction and computer assisted instruction.

Chapter III

Method

To implement the identified social studies skills objectives the following plan was used: (1) students were trained on the use of available multimedia instructional technology in the school's media center; (2) utilizing this training students researched geography terminology and developed map skills; (3) students received traditional classroom instruction and reviewed to further enhance performance of skills acquired through interaction with instructional technology; (4) students received assessment feedback midway through the proposal; (5) as a culminating activity, students produced a travel guide booklet for schoolwide distribution to demonstrate growth in social studies skills.

To increase the social studies skills of the targeted group in the areas of vocabulary, retrieving information, and reading and interpreting maps, a "Social Studies Skills Enhancement" program was used for twelve weeks. The targeted group met with the instructor three times a week for fifty minutes. The instructional environment for all activities was divided between a self-contained classroom and the school's media center. Instruction was three fold: individually, paired units, and the group as a whole.

The following activities were conducted within the implementation

period of this report:

Week 1

1. The targeted group was advised that the focus of this program was an imaginary trip to the European continent.
2. A teacher-made Pre-Vocabulary Test (Appendix D:37), consisting of 30 words was administered by the writer to the targeted group. Results were recorded and documented (Appendix D:39).
3. A teacher-made Pre-Multimedia Instructional Technology Identification and Usage Skills Test (Appendix E:41), consisting of 25 questions was administered by the writer to the targeted group. Results were recorded and documented (Appendix E:43).
4. A teacher-made Pre-Map Skills Test (Appendix F:45), consisting of 30 questions was administered by the writer to the targeted group. Results were recorded and documented (Appendix F:47).

Week 2

1. Students received training in Media Center by media specialist on the use of available multimedia instructional technology: Grolier's on CD-ROM, Text On Microfiche,

CD-ROM Automated Card Catalog System, and word processing software and hardware.

Week 3

1. Each student located, defined, and listed the terms from Pre-Vocabulary Test using Grolier's on CD-ROM and produced a completed glossary using a word processing program.
2. Each student produced a set of flashcards containing the terms from the completed glossary.

Week 4

1. Students were shown a travel video about the continent of Europe.
2. Students were placed into two cooperative learning groups consisting of four students and reviewed glossary terms with flashcards completed during third week.
3. Teacher led review of map skills Pre-Test components with the aid of an overhead projection unit. Students recorded this list and maintained it for future review.

Week 5

1. Targeted group students were paired with a partner. Through pairing and sharing interaction, students selected a country from the European continent and completed a teacher made

worksheet (Appendix G:49) using Grolier's on CD-ROM, Text On Microfiche, and the CD-ROM Automated Card Catalog System.

2. Students were placed into two cooperative learning groups which consisted of four students and reviewed glossary terms using flashcards completed during third week.
3. Teacher led review of map skills Pre-Test components with the aid of an overhead projection unit. Students used the previously recorded list for this review.

Week 6

1. The four pairing and sharing teams reviewed glossary and map skill terms by playing geography Scrabble®. The instructor provided a complete Scrabble® game for this activity. Students constructed words and terms that were introduced in the vocabulary and map skills Pre-Tests. Each team member used his/her vocabulary flashcards and map skill terms list as an aid in this activity.
2. Teacher-made worksheet from week number five was completed.

Week 7

1. Midpoint assessment achieved through the administering of the three teacher-made Midpoint Tests (Appendix H:50).

2. Students were shown a travel video about Great Britain.

Week 8

1. Pairing and sharing teams used the CD-ROM Automated Card Catalog System and located a resource in the media center and drew a map of the country chosen in week five/ activity one. The map showed the location of major cities. Additionally, pairing and sharing teams drew a map of one of the major cities and showed location of landmarks, tourist attractions, highways, airports, and waterways.
2. Pairing and sharing teams produced a report on their chosen country using information from teacher-made worksheet via a word processor.
3. Students were placed into two cooperative learning groups consisting of four students and reviewed glossary terms from student made flashcards.
4. Teacher led review of map skills Pre-Test components with the aid of an overhead projection unit. Students used previously recorded list for this review.

Week 9

1. Pairing and sharing teams produced a travel brochure for their chosen country.
2. Students were placed into two cooperative learning groups

consisting of four students and reviewed glossary terms using student made flashcards.

3. Teacher led review of map skills Pre-Test components with the aid of an overhead projection unit. Students used previously recorded list for this review.
4. Pairing and sharing teams completed report on country using a word processor.

Week 10

1. Pairing and sharing teams completed travel brochures.
2. Pairing and sharing teams combined their brochures, reports, and maps into a geography travel guide of the European continent.
3. The four pairing and sharing teams reviewed glossary and map skill terms by playing geography Scrabble®. The instructor provided a complete Scrabble® game for this activity. Students constructed words and terms that they were introduced to in the vocabulary and map skills Pre-Tests. Each team member used his/her vocabulary flashcards and map skill terms list as an aid in this activity.

Week 11

1. Working cooperatively, the targeted group completed cover

of travel guide, laminated it, and produced a finished glossary by using a word processor.

2. Students cooperatively prepared an oral presentation about the geography travel guide book based upon information ascertained about specific countries by pairing and sharing teams.

Week 12

1. Group oral report presented.
2. Completed travel guide book was presented to media center.
3. Students were given a teacher-made Post-Vocabulary Test (Appendix D:37). Results were recorded and documented (Appendix D:39).
4. Students were given a teacher-made Post-Multimedia Instructional Technology Identification and Usage Skills Test (Appendix E:41). Results were recorded and documented (Appendix E:43).
5. Students were given a teacher-made Post-Map Skills Test (Appendix F:45). Results were recorded and documented (Appendix F:47).

CHAPTER IV

Results

The purpose of this chapter is to evaluate the results and list the major findings. The intended outcome of the project was to improve social studies test scores through the enhancement of social studies skills. The participants were eight sixth grade students assigned to a public middle school in the southeastern region of the United States. The study was conducted during the spring semester of the 1994 school year.

The first objective, increased vocabulary skills, was evaluated according to the response by the students on the teacher-made Pre and Post Vocabulary Test (Appendix D:37). Success was attained when 75 percent of the targeted students improved their individual scores by 40 percent based upon a comparison of their individual pre and posttest scores. The pre-test was administered during the first week of implementation. The posttest was administered during the twelfth week of implementation. When the targeted students were pretested, results indicated that the group exhibited poor vocabulary skills. During the implementation period, students received instruction to enhance vocabulary skills. These activities included the creation of a vocabulary glossary, vocabulary flashcards and teacher-led vocabulary review sessions. These activities enabled students to build vocabulary skills through

individual and group activities. Posttest results indicated that this objective was successfully met. Percentage increases in this area, indicated an improvement rate of more than 40 percent by 75 percent of the targeted group (D:39). It should be noted that posttest results indicated that the entire group exhibited growth. The growth rate of Students E and H fell below the rate of 40 percent with respective increases of 25 percent and 20 percent.

The second objective, increased identification and usage skills of multimedia instructional technology, was evaluated according to student responses on the teacher-made Pre and Post Multimedia Instructional Technology Identification and Usage Skills Test (Appendix E:41). Success was attained when 75 percent of the targeted students improved their individual scores by 30 percent based upon a comparison of their individual pre and posttest scores. The pre-test was administered during the first week of implementation. The posttest was administered during the twelfth week of implementation. During the twelve week period, students received training in the use of multimedia instructional technology and participated in activities that included its use. These activities included word searches, completion of worksheets and information retrieval. Posttest results indicated that this objective was successfully met. Percentage increases in this area, indicated an improvement rate of more than 30 percent by 75 percent of the targeted group (E:43). Notation

should be made with respect to students D and E. According to posttest results, Student D exhibited a decrease of skills in this area, while student E showed equivalent pre and posttest scores.

The third objective, increased critical thinking map skills, was evaluated according to students responses on the teacher-made Pre and Post Map Skills Test (F:45) . Success was attained when 75 percent of the targeted students improved their individual scores by 40 percent based upon a comparison of their individual pre and posttest scores. The pre-test was administered during the first week of implementation. The posttest was administered during the twelfth week of implementation. During the implementation period, students participated in activities which included critical thinking map skills such as place, location, identification, scale, direction and map drawing. Posttest results indicated that this objective was successfully met. Percentage increases in this area, indicated an improvement rate of more than 40 percent by 75 percent of the targeted group (F:47). Seven members of the target group showed growth in this area. Student A received the lowest score on the pre-test and showed the highest percentage of growth. Only student H scored as high on the posttest, twenty-two correct answers, as student A. Student E was the only member of the targeted group who did not exhibit growth in this area. This student's pre and posttest scores were equivalent.

Additional statistical data was compiled through the placement of

students in groups according to results of the Social Science Subtest of the 1993 Stanford Achievement Test. Group I included students A, B, C, and D with scores below the median percentile on the subtest. Group II included students E, F, G, and H with scores at or above the median percentile. A comparison of combined average Pre and Post Vocabulary Test results and percentage of growth indicated a higher rate of growth for group I (C:33). A comparison of combined average Pre and Post Multimedia Instructional Technology Identification and Usage Skills Test results and percentage of growth indicated a higher rate of growth for group I (C:34). A comparison of combined average Pre and Post Map Skills Test results and percentage of growth indicated a higher rate of growth for group I (C:35).

CHAPTER V

Recommendations

The successful completion of the objectives of this report was shared with the faculty members of targeted school. Through the duplication and distribution of the finished student project, faculty was provided with concrete evidence that this report was effective and successfully brought to fruition. A copy of this report, along with the completed student project was presented to the Media Center at the school site. Additionally, the completed European travel guide was placed on display in the school's Media Center for those who desire to implement and incorporate this "Social Studies Skills Enhancement" program in their classrooms.

The writer of this practicum is a firm believer that multimedia media instructional technology has practical educational value in today's classrooms. Student's learning styles and modalities can be satisfied through its use as evidenced by the findings of this writer. Students with either deficient or sufficient abilities in the social social studies can benefit from its use.

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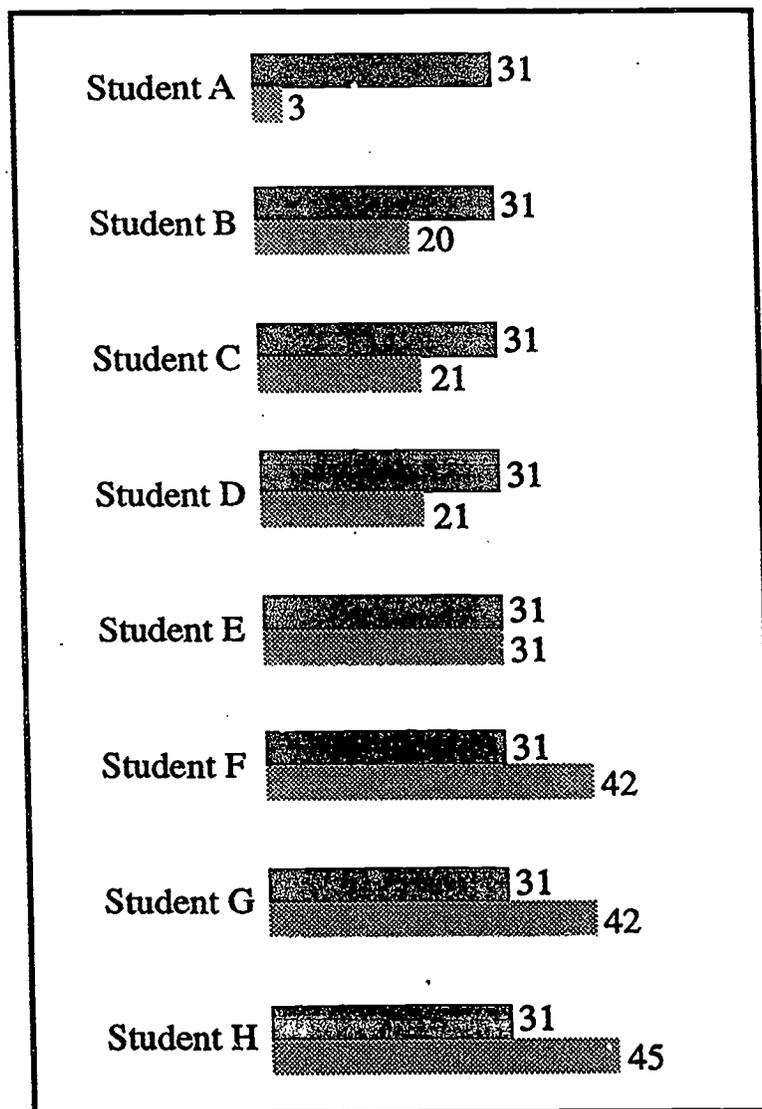
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Appendix A

1993 Stanford Achievement Test Social Science Subtest Scores

APPENDIX A
 1993 STANFORD ACHIEVEMENT TEST
 SOCIAL SCIENCE SUBTEST SCORES BY PERCENTILE



DADE COUNTY MEDIAN PERCENTILE

TARGET GROUP MEMBER PERCENTILE

Appendix B
Target Group Social Studies Report Card Grades

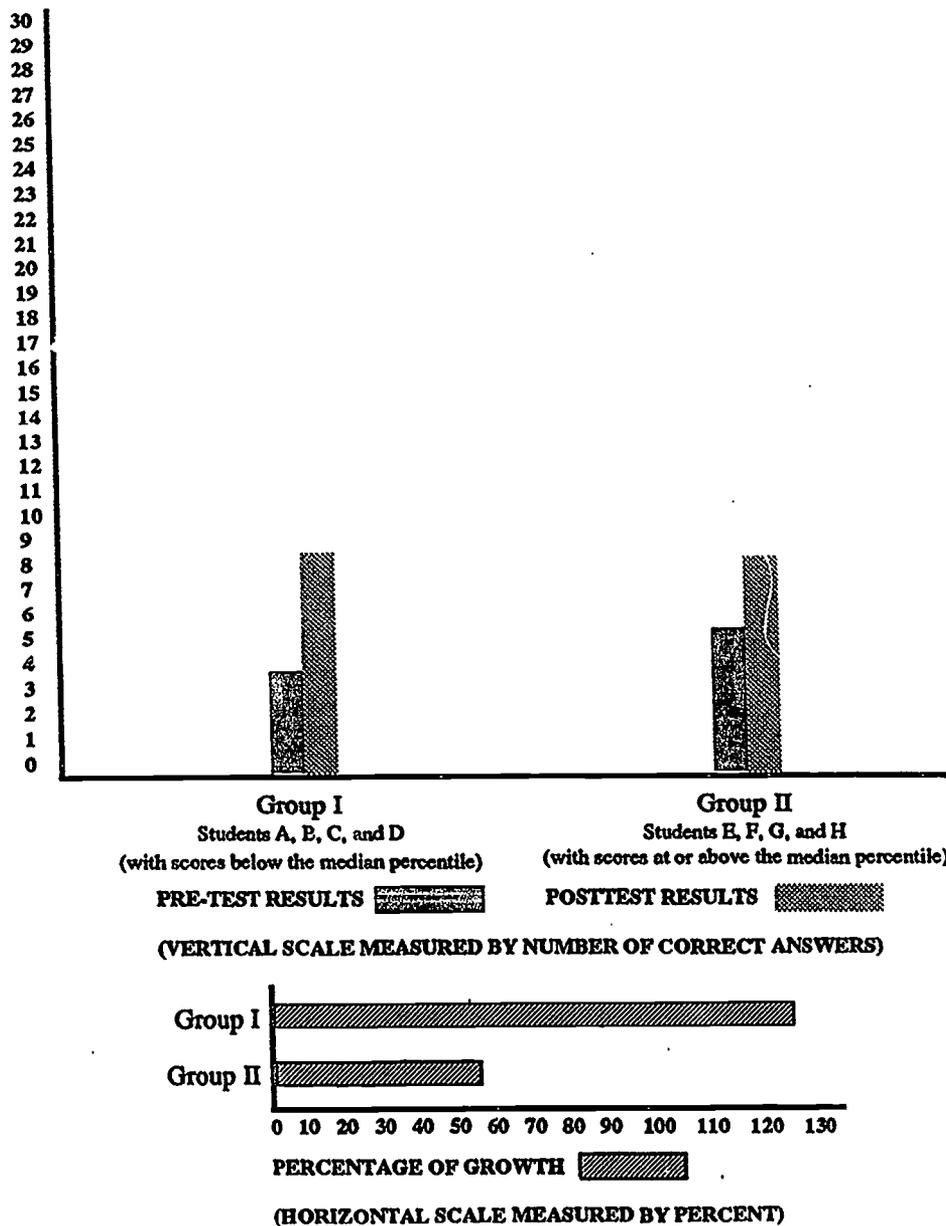
APPENDIX B
TARGET GROUP SOCIAL STUDIES
REPORT CARD GRADES
1993 - 1994 · QUARTERS 1 AND 2

	First Quarter	Second Quarter	Midterm Exam
Student A	F	F	F
Student B	C	D	F
Student C	D	F	F
Student D	D	C	F
Student E	C	B	C
Student F	C	A	A
Student G	C	C	F
Student H	C	C	C

Appendix C
Comparison of Combined Average
Pre-Test and Posttest Results and Percentage of Growth

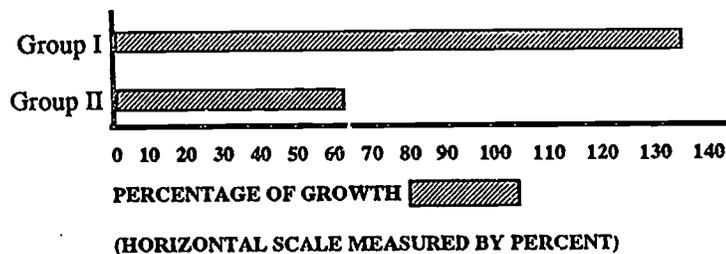
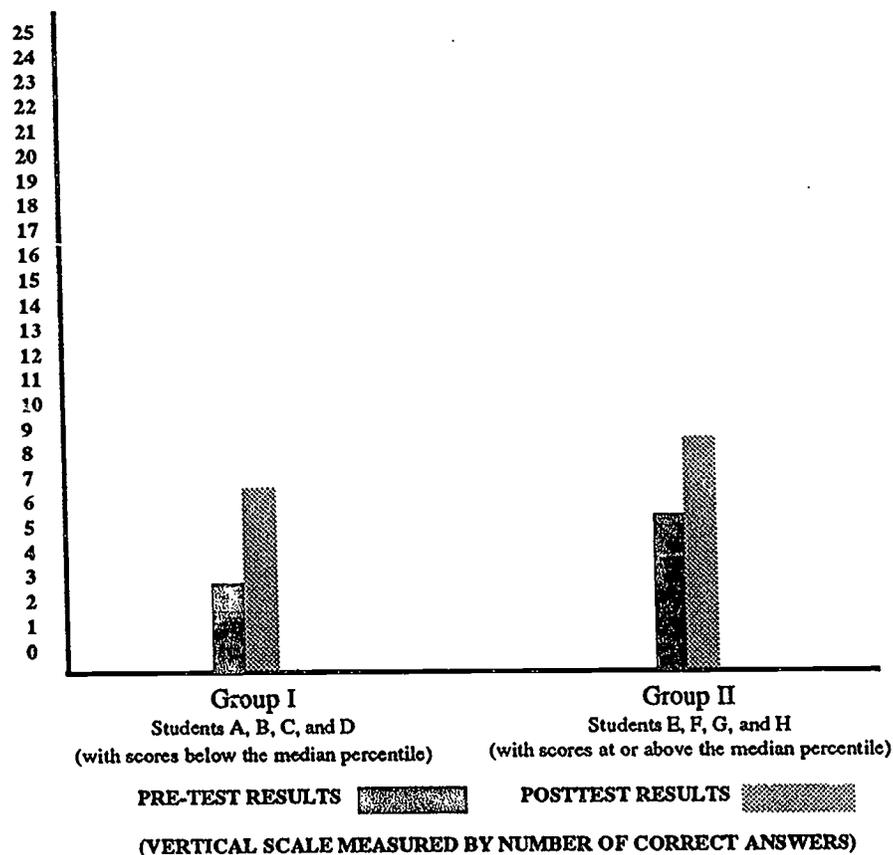
APPENDIX C:1

COMPARISON OF COMBINED AVERAGE PRE/POST VOCABULARY SKILLS TEST RESULTS AND PERCENTAGE OF GROWTH OF TARGET GROUP MEMBERS WHO SCORED BELOW THE MEDIAN PERCENTILE TO THOSE WHO SCORED AT OR ABOVE THE MEDIAN PERCENTILE ON THE SOCIAL SCIENCE SUBTEST OF THE 1993 STANFORD ACHIEVEMENT TEST.



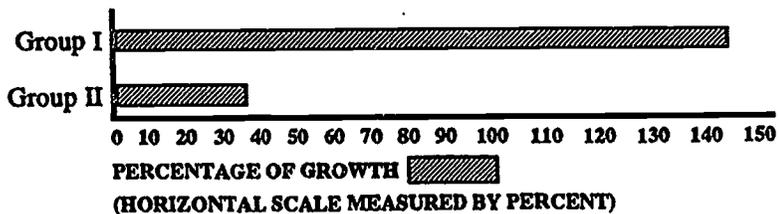
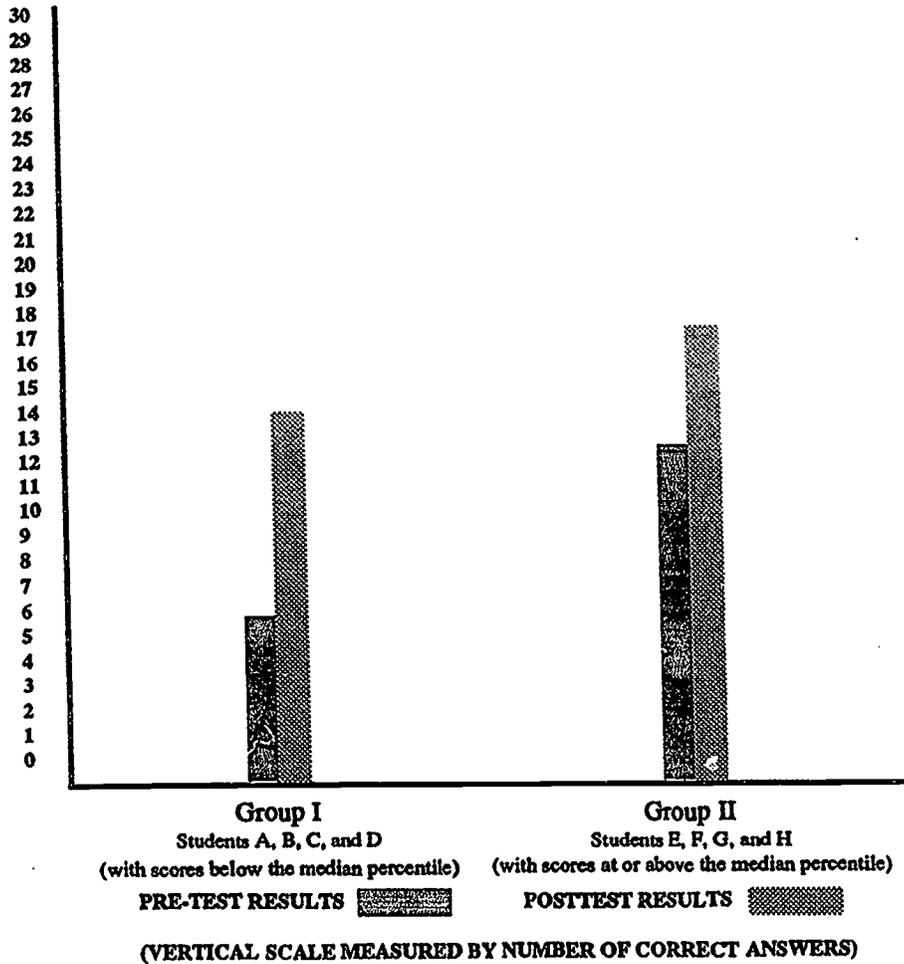
APPENDIX C:2

COMPARISON OF COMBINED AVERAGE PRE/POST MULTIMEDIA INSTRUCTIONAL TECHNOLOGY IDENTIFICATION AND USAGE SKILLS TEST RESULTS AND PERCENTAGE OF GROWTH OF TARGET GROUP MEMBERS WHO SCORED BELOW THE MEDIAN PERCENTILE TO THOSE WHO SCORED AT OR ABOVE THE MEDIAN PERCENTILE ON THE SOCIAL SCIENCE SUBTEST OF THE 1993 STANFORD ACHIEVEMENT TEST.



APPENDIX C:3

COMPARISON OF COMBINED AVERAGE PRE/POST MAP SKILLS TEST RESULTS AND PERCENTAGE OF GROWTH OF TARGET GROUP MEMBERS WHO SCORED BELOW THE MEDIAN PERCENTILE TO THOSE WHO SCORED AT OR ABOVE THE MEDIAN PERCENTILE ON THE SOCIAL SCIENCE SUBTEST OF THE 1993 STANFORD ACHIEVEMENT TEST.



Appendix D
Pre/Post Vocabulary Skills Test and Test Results

APPENDIX D:1
PRE/POST VOCABULARY SKILLS TEST

Define or identify the following:

1. geography
2. atlas
3. axis
4. hemisphere
5. international dateline
6. latitude
7. longitude
8. map
9. map scale
10. meridian
11. prime meridian
12. equator
13. climate
14. archipelago
15. absolute location
16. demography
17. capital
18. Europe

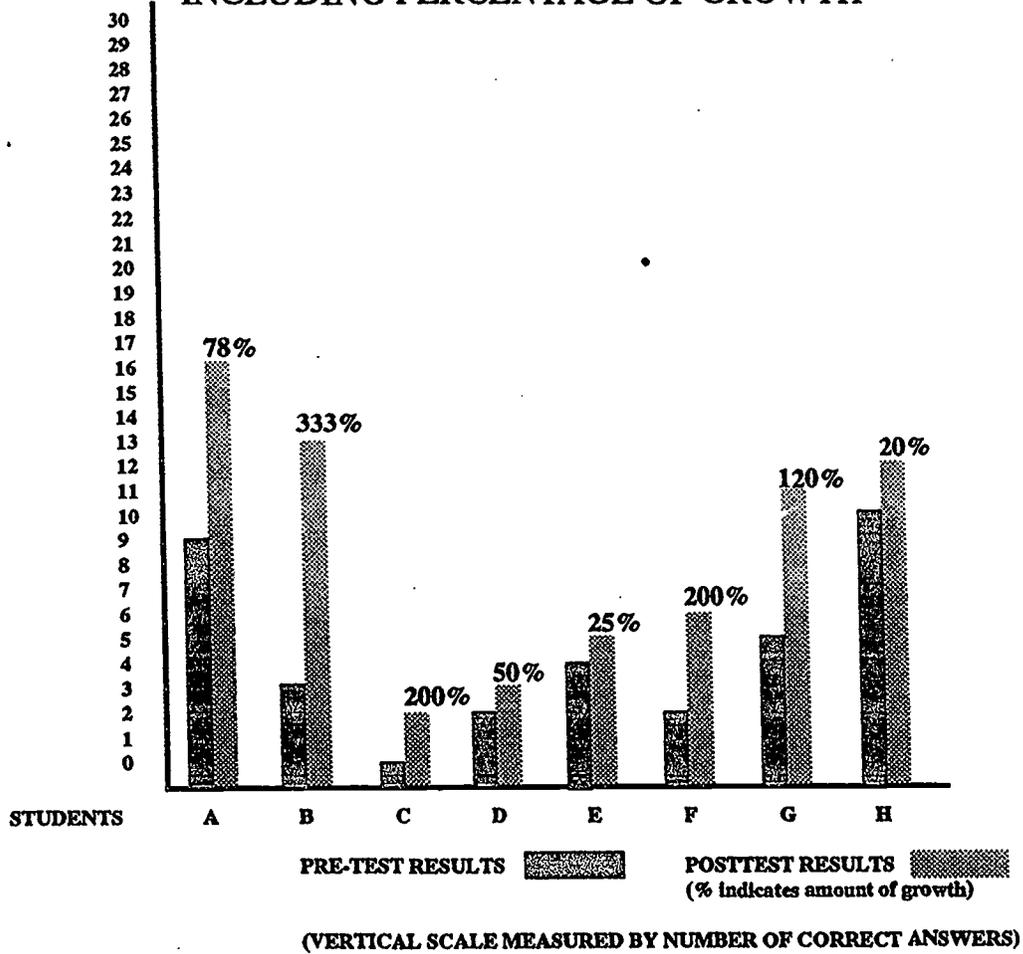
APPENDIX D:2

19. elevation
20. river
21. strait
22. border
23. coast
24. island
25. city
26. ocean
27. sea
28. bay
29. plain
30. plateau

APPENDIX D:3

VOCABULARY SKILLS PRE-TEST AND POSTTEST RESULTS

INCLUDING PERCENTAGE OF GROWTH



Appendix E
Pre/Post Multimedia Instructional Technology
Identification and Usage Skills Test and Test Results

APPENDIX E:2

14. What is the "secret" to doing an expanded search on T.O.M.?
15. Can Boolean logic be used to search for an item in IMPACT?
How?
16. Is it possible to borrow an item from Coral Gables High School if your school doesn't have it? Are there any restrictions?
17. Explain what you would do if you found an item marked NP 92 MOZ while looking up information on Mozart?
18. What program does the Media Center use for word processing?
19. What programs are available in addition to the word processing program.
20. What CD-ROM would you access for a map of Europe?
21. Can you find out what the song of a cardinal sounds like using any of the CD-ROM programs? Which one?
22. Which CD-ROM program would you access to find a book on Martin Luther King, Jr.?
23. What program would you use to find a magazine article on Martin Luther King, Jr. ?
24. What program would you use to hear a sample of Martin Luther King, Jr's. "I Have A Dream" speech?
25. How would you get a copy of an article located on a microfiche?

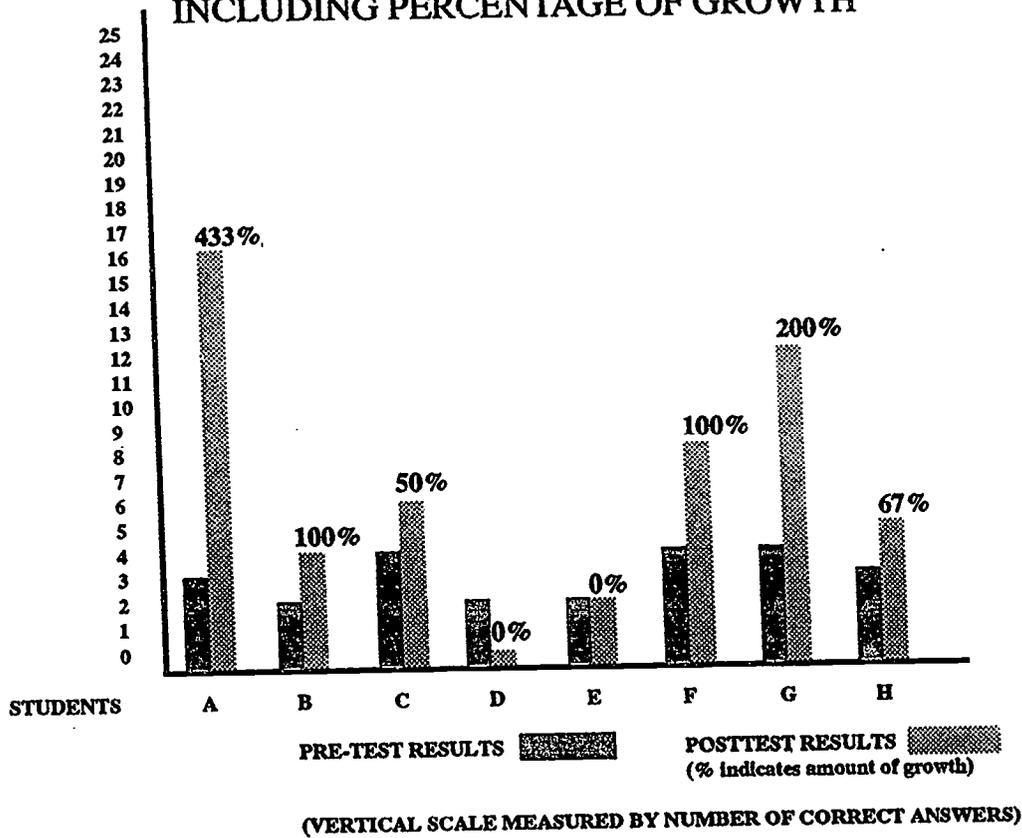
APPENDIX E:3

MULTIMEDIA INSTRUCTIONAL TECHNOLOGY

IDENTIFICATION AND USAGE SKILLS

PRE-TEST AND POSTTEST RESULTS

INCLUDING PERCENTAGE OF GROWTH



Appendix F
Pre/Post Map Skills Test and Test Results

APPENDIX F:1
PRE/POST MAP SKILLS TEST

Answer the following questions.

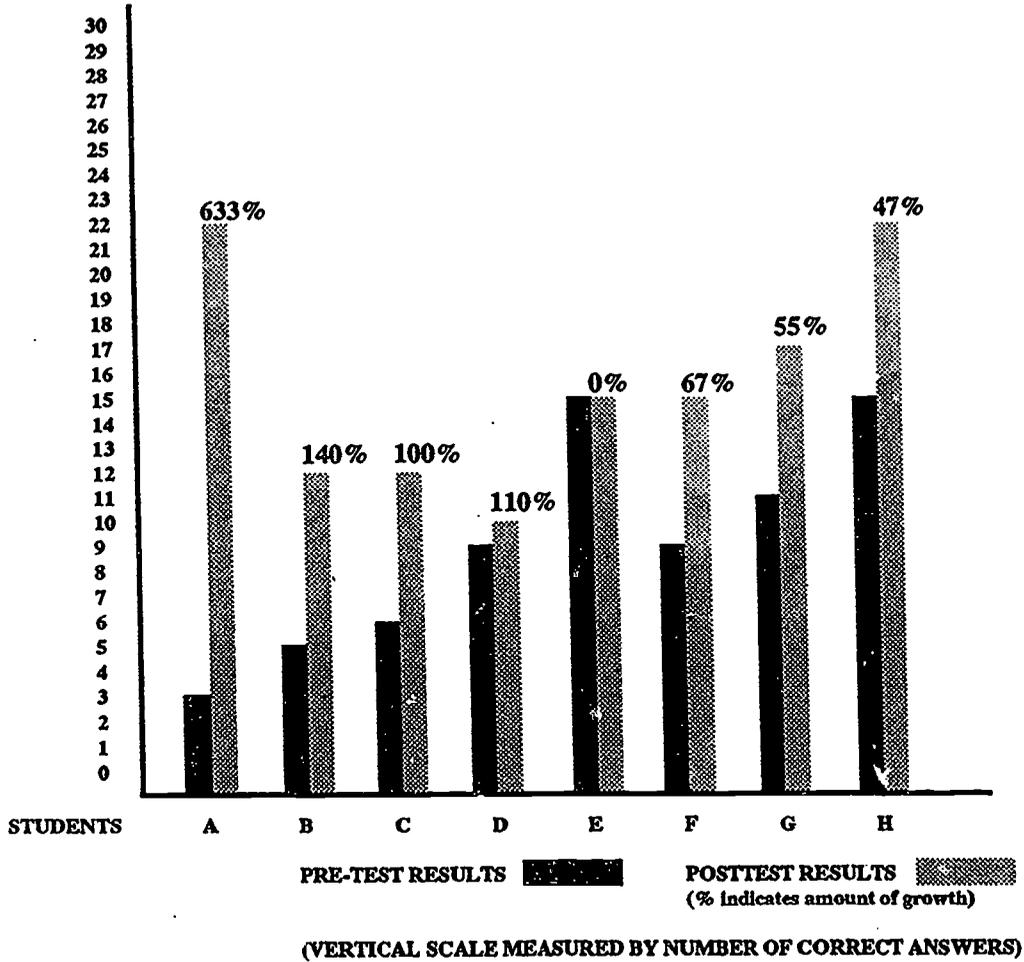
1. What is the capital of Germany?
2. Name the country that is located between Ukraine and Romania.
3. Traveling from Paris, France, to Brussels, Belgium, would take you in what direction?
4. What country meets Spain on its western border?
5. How many miles is it from Madrid, Spain, to Malaga, Spain?
6. How many countries touch the border of Hungary?
7. Which city in Italy is larger, Turin or Florence?
8. Name the river that flows through Rome, Italy.
9. Name the sea located between between the United Kingdom and Ireland.
10. List three large cities in Ukraine.
11. What sea does the east coast of Italy touch?
12. Name the river that flows through Latvia and Byelarus.
13. What country does the Island of Corsica belong to?
14. What is the absolute location of Prague, Czechoslovakia?
15. What city in the United Kingdom is located southeast of Liverpool?

APPENDIX F:2

16. What is the distance in kilometers between Stuttgart, Germany and Bern, Switzerland?
17. What sea touches the northern border of Poland?
18. What is the absolute location of Aarhus, Denmark?
19. What two countries does the Bay of Biscay touch?
20. Moscow is directly north of what other Russian city?
21. Genoa, Italy is a port city on what sea?
22. Sarajevo is the capital of what country?
23. Name five rivers in Spain.
24. Tallinn, Estonia, is a port city on what sea?
25. On what river is Orleans, France located?
26. What city is two hundred miles east of Marseille, France?
27. What island is seven hundred miles east of Madrid, Spain?
28. How many kilometers would you travel if you went from Minsk, Byelarus, to Krakow, Poland, and then to Rome, Italy?
29. What is the distance between La Coruna, Spain, and Cork, Ireland?
30. What sea sits between Ireland and the United Kingdom?

APPENDIX F:3

MAP SKILLS PRE-TEST AND POSTTEST RESULTS
INCLUDING PERCENTAGE OF GROWTH



Appendix G
Teacher-Made Worksheet

APPENDIX G

TEACHER-MADE WORKSHEET

Instructions: After you have selected your European country, answer the following questions about the country you chose.

1. What is the most popular language spoken there?
2. What type or form of government does your country have?
3. What is the population of your country?
4. What is the climate of your country?
5. List five points of interest in your country.
6. List five famous people who are from your country.
7. List the major cities in your country.
8. List the names of the famous parks in your country.
9. List the names of the famous museums in your country.
10. List the famous tourist attractions in your country.
11. Make a list of famous landmarks in your country.

Appendix H
Midpoint Tests and Test Results

APPENDIX H:1
VOCABULARY SKILLS MIDPOINT TEST

Define or identify the following:

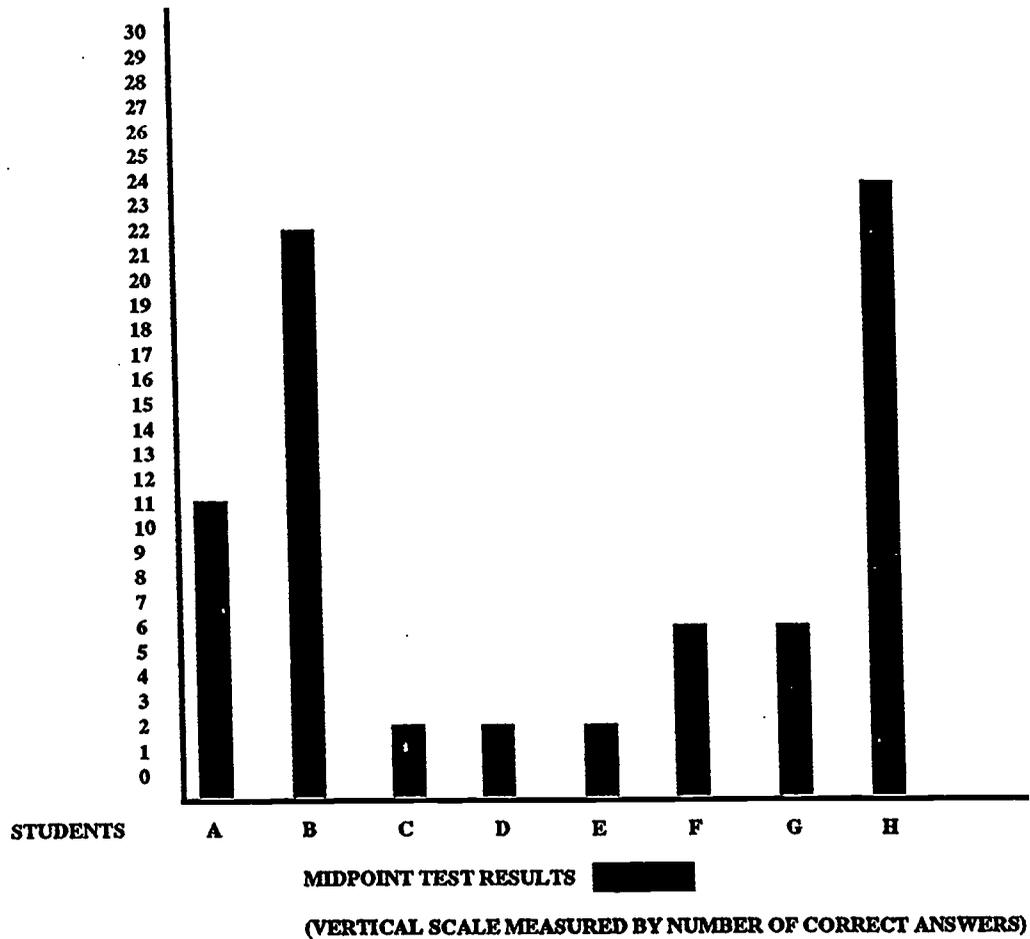
1. geography
2. atlas
3. axis
4. hemisphere
5. international dateline
6. latitude
7. longitude
8. map
9. map scale
10. meridian
11. prime meridian
12. equator
13. climate
14. archipelago
15. absolute location
16. demography
17. capital
18. Europe

APPENDIX H:2

19. elevation
20. river
21. strait
22. border
23. coast
24. island
25. city
26. ocean
27. sea
28. bay
29. plain
30. plateau

APPENDIX H:3

VOCABULARY SKILLS MIDPOINT TEST RESULTS



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APPENDIX H:4

MULTIMEDIA INSTRUCTIONAL TECHNOLOGY

IDENTIFICATION AND USAGE SKILLS MIDPOINT TEST

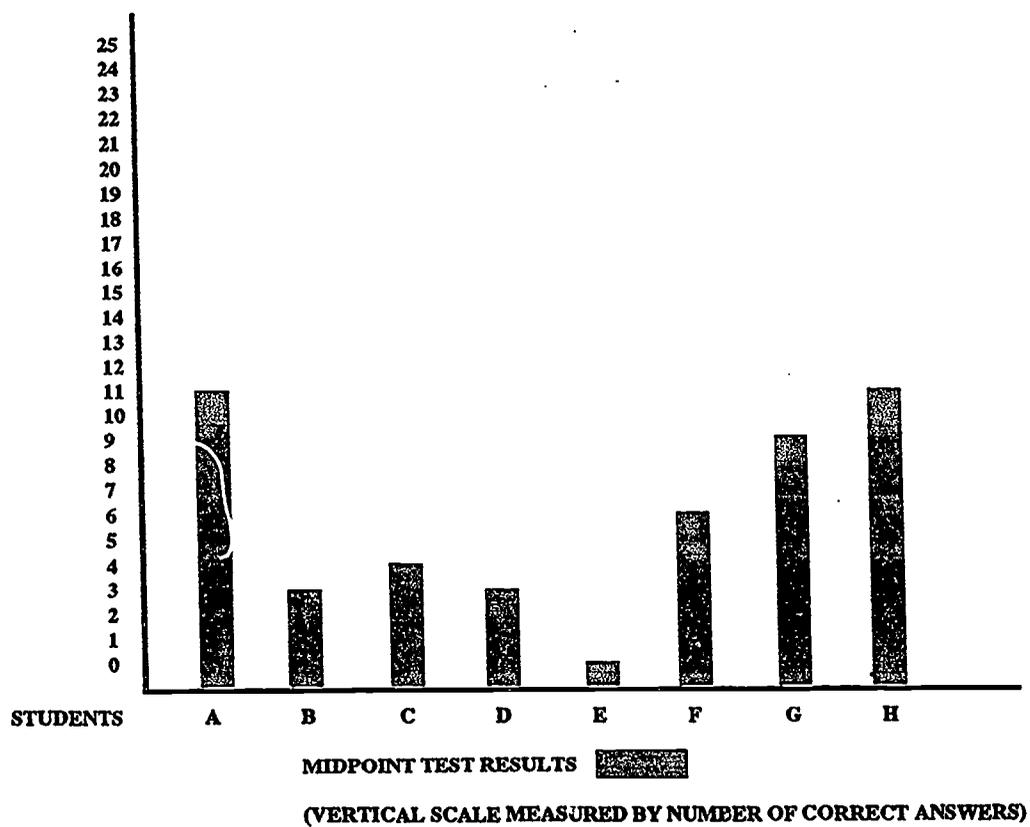
Answer the following questions using complete sentences.

1. Are there computers in the Media Center?
2. If so, where are they located?
3. What are they used for?
4. What is the card catalog on CD-ROM called?
5. What program allows for researching magazine articles?
6. What is another name for newspapers or magazines?
7. What encyclopedia is found on CD-ROM?
8. List three pieces of equipment in the Media Center available for student use.
9. What is the designation of materials which are not printed?
10. Using the IMPACT catalog, list the four ways you can search for an item in the Media Center.
11. What function key do you press to go back to the previous step in IMPACT?
12. What function keys goes all the way back to the beginning in IMPACT?

APPENDIX H:5

- 13 In all three CD-ROM programs (Grolier's Encyclopedia, T.O.M., and IMPACT) how would you search for an item on John F. Kennedy?
14. What is the "secret" to doing an expanded search on T.O.M.?
15. Can Boolean logic be used to search for an item in IMPACT?
How?
16. Is it possible to borrow an item from Coral Gables High School if your school doesn't have it? Are there any restrictions?
17. Explain what you would do if you found an item marked NP 92 MOZ while looking up information on Mozart?
18. What program does the Media Center use for word processing?
19. What programs are available in addition to the word processing program.
20. What CD-ROM would you access for a map of Europe?
21. Can you find out what the song of a cardinal sounds like using any of the CD-ROM programs? Which one?
22. Which CD-ROM program would you access to find a book on Martin Luther King, Jr.?
23. What program would you use to find a magazine article on Martin Luther King, Jr. ?
24. What program would you use to hear a sample of Martin Luther King, Jr.'s. "I Have A Dream" speech?
25. How would you get a copy of an article located on a microfiche?

APPENDIX H:6
MULTIMEDIA INSTRUCTIONAL TECHNOLOGY
IDENTIFICATION AND USAGE SKILLS
MIDPOINT TEST RESULTS



APPENDIX H:7
MAP SKILLS MIDPOINT TEST

Answer the following questions.

1. What is the capital of Germany?
2. Name the country that is located between Ukraine and Romania.
3. Traveling from Paris, France, to Brussels, Belgium, would take you in what direction?
4. What country meets Spain on its western border?
5. How many miles is it from Madrid, Spain, to Malaga, Spain?
6. How many countries touch the border of Hungary?
7. Which city in Italy is larger, Turin or Florence?
8. Name the river that flows through Rome, Italy.
9. Name the sea located between between the United Kingdom and Ireland.
10. List three large cities in Ukraine.
11. What sea does the east coast of Italy touch?
12. Name the river that flows through Latvia and Byelarus.
13. What country does the Island of Corsica belong to?
14. What is the absolute location of Prague, Czechoslovakia?
15. What city in the United Kingdom is located southeast of Liverpool?

APPENDIX H:8

16. What is the distance in kilometers between Stuttgart, Germany and Bern, Switzerland?
17. What sea touches the northern border of Poland?
18. What is the absolute location of Aarhus, Denmark?
19. What two countries does the Bay of Biscay touch?
20. Moscow is directly north of what other Russian city?
21. Genoa, Italy is a port city on what sea?
22. Sarajevo is the capital of what country?
23. Name five rivers in Spain.
24. Tallinn, Estonia, is a port city on what sea?
25. On what river is Orleans, France located?
26. What city is two hundred miles east of Marseille, France?
27. What island is seven hundred miles east of Madrid, Spain?
28. How many kilometers would you travel if you went from Minsk, Byelarus, to Krakow, Poland, and then to Rome, Italy?
29. What is the distance between La Coruna, Spain, and Cork, Ireland?
30. What sea sits between Ireland and the United Kingdom?

APPENDIX H:7

MAP SKILLS MIDPOINT TEST RESULTS

